REMARKS/ARGUMENTS

The present amendment is submitted in an earnest effort to advance the case to issue without delay.

Claims 14-17, 20-21 and 23 were objected to for improper dependency. These claims have now been amended with all dependent claims referring to independent claim 11.

Claims 14-16 were objected to regarding the meaning of "clarified". The term "clarified" has been deleted.

Claims 11, 14-17, 20-21 and 23 were rejected under 35 U.S.C. § 102(b) as anticipated by Takahashi et al. (U.S. Patent 6,329,465 B1). Applicants traverse this rejection.

Applicants' problem was development of a transparent or at least translucent bottle as vehicle for liquid laundry detergents. Greater clarity of the bottle provides aesthetic appeal to consumers. Moreover, the consumer can visibly view the product purchase through the bottle container to identify and avoid defective items. Potential defects include separation of phases (water from thickener or detergent), viscosity and color. Of further importance, a transparent or translucent bottle wall allows consumers to easily ascertain how much product remains.

Applicants have solved the problem through at least a three layered bottle wall. The outer wall is a blend of metallocene polyethylene polymer and a homopolymer of high density polyethylene. Despite the presence of an opacificing middle layer of a

recycled resin, the blend in the outer layer permits transmission of light through the bottle wall. Consumers are now able to view the liquid inside the bottle.

Takahashi et al. discloses an ethylene copolymer composition which alone or with other plastics is reported to provide excellent transparency, mechanical strength or moldability. The ethylene copolymer composition was said to be useful for producing molded products such as films, sheets, packaging materials, injection molded products, expansion molded products and fibers. See the Abstract.

The 100 column disclosure is encyclopedic. From this resource, the Examiner has selectively identified elements considered to be part of the presently claimed invention.

Applicants' independent claim requires at least three layers, i.e. an outer layer, a middle layer and an inner layer. The outer layer comprises a blend of a metallocene polyethylene polymer and a homopolymer polyethylene. The former is defined by a density from 0.91 to 0.95 g/cm^3 and the latter by a density greater than 0.957 g/cm^3.

The Examiner considered that a disclosure at column 88 (lines 61-67) bridging to column 89 (lines 1-8) which reports the possibility of blending the metallocene polymer with either low density or high density polyethylene as anticipating the "homopolymer polyethylene" of claim 11.

Respectfully stated the Examiner has fallen short of presenting an anticipatory disclosure. Applicants' claim 11 requires the homopolymer polyethylene to be one with a density greater than 0.957 g/cm^3. The single reference to "high density polyethylene" and several mentions of low density polyethylene in the cited passages are devoid of

identifying densities of those plastics. No doubt the Examiner well understands that homopolymerized polyethylene can have a wide range of functional properties and that many parallel the specific density (which can define structures at molecular level). Absent a disclosure in the reference of the specifically claimed density, Takahashi et al. could not anticipate the claims.

Perhaps realizing this deficiency, the Examiner cited Takahashi et al. for disclosing a polyethylene density ranging from 0.880 to 0.970 g/cm^2. Column 9 (lines 42-45) was cited. He has concluded that "densities within the range of 0.880 to 0.970 g/cm^3 are used interchangeably". Applicants traverse this view.

The disclosure at column 9 (lines 42-44) is as follows:

> "The ethylene/α-olefin copolymer (A) has a density (d) of 0.880 to 0.970 g/cm^3, preferably 0.880 to 0.960 g/cm^3, more preferably 0.890 to 0.935 g/cm^3, most preferably 0.905 to 0.930 g/cm^3."

Evident from the above passage is that the density range recitation is exclusively that of the ethylene/α-olefin copolymer, i.e. the metallocene polyethylene polymer. This section of the disclosure has nothing whatsoever to do with the type of homopolymer polyethylene usable in a co-blend with the metallocene polyethylene polymer.

Next, the Examiner has highlighted the transparency aspect of the reference. Attention was drawn to column 37 (lines 56-60) cited for disclosing a bottle wall with a transmittance of 92%. A closer reading of the passage would reveal otherwise. Therein it states:

"(iv) In case of a film having a thickness of 100 μm, the initial light transmittance is not less than 90%, preferably not less than 92%, and the light transmittance after outdoor exposure of 120 days is not less than 85%, preferably not less than 87%."

Evident from this passage is that film has good light transparency. Emphasis on the film aspect is the sub-header "Multi-layer Film" appearing at column 37 (line 33) and reference to "agricultural multi-layer film" at column 37 (line 45). Films are not walls of bottles. They are considerably thinner than for instance the wall of a liquid laundry detergent bottle. Takahashi et al. is therefore reporting transparancy for films rather than for bottle walls, the subject of applicants' claim 11. Here again the reference does not anticipate the claims.

One must remember that the Takahashi et al. disclosure is to uses of ethylene copolymer in a variety of different applications. Some of these are films, others are fibers and still others are molded products. See the last two sentences of the Abstract. Note the term "or" in the sentence defining molded products as excellent in mechanical strength, heat resistance or transparency. Not every section of Takahashi et al. refers to each of those uses. While the ethylene copolymer may give transparency to a film, there is no disclosure or suggestion that combined with other types of plastics in perhaps different structural forms (i.e. bottle walls), that a particular physical property would be achieved.

Recycled resin was said by the Examiner to be disclosed at column 51 (lines 4-19). The passage reads:

> "The novel film has advantageously improved film strength, and therefore, in addition to the recycling materials and scrap materials, polymers for dilution can be mixed with or added to the film composition used for producing the novel film, in amounts larger than the amounts typically possible when the conventional polyethylene film compositions are used."

Film rather than bottle walls are the subject of this segment of the reference. Recycled and scrap materials are said to be tolerated because the ethylene copolymer has extra film strength. Nothing is said with respect to transparency. Indeed, one would expect that recycled and scrapped materials in the context of seeking a transparent or translucent bottle wall might be inappropriate. On a more technical basis, this or any other passage of the reference fails to disclose that a recycled resin be present in an amount of at least 25%. Still further, the reference fails to disclose that the recycled resin be part of the middle layer. Absent identification of the aforementioned two claim elements, Takahashi et al. would here also not anticipate the claims.

Claims 14-16 recite the presence of a polypropylene in amounts ranging from about 0.1 to about 50% (and narrower ranges) within the outer layer of the bottle wall. The Examiner has cited Takahashi et al. for disclosing polypropylene at column 88 (lines 66-67) bridging to column 89 (lines 1-8). Applicants note that the referenced passage neither specifies the concentration range of "about 0.1 to about 50%" nor is there disclosure that the polypropylene be in the outer layer. For both of these reasons, the reference again fails to anticipate the claims.

Under applicants' duty of disclosure, the Examiner is informed of a related co-pending application Serial No. 10/445,464 filed May 27, 2003 published as U.S. Patent application 2004/0241360 A1.

In view of the foregoing amendment and comments, applicants request the Examiner to reconsider the rejection and now allow the claims.

Respectfully submitted,

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